PDR RID Report

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Document Review Package
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Category Name User & Algorithm Models **Actionee** HAIS
Sub Category User Model
Subject Development and verification of user model

Description of Problem or Suggestion:

Source of user access data was identified as "participating DAACs" and a "Development" Server, as well as earlier Barkstrom & James independent estimates only.
Analysis/verification of resulting model appears to be insufficient (statement was made that "DAAC Data was incorporated in modeling effort", not that any verification of model was performed against any real thing)

Originator's Recommendation

User access data/lessons learned should be obtained from broader operational base (e.g., ISTP CDHF, UARS CDHF, NSSDC, etc.). as well as ongoing testbeds (e.g., Emory AVHRR testbed, etc.). Not only should this data be incorporated, this data should be used to analyze/verify/validate model results.
Need to be able to justify/explain inconsistencies between statistical analysis and current experiences in order to achieve any credibility in model.

GSFC Response by: **GSFC Response Date**

HAIS Response by: T. Suhrstedt **HAIS Schedule**
HAIS R. E. C. Jarvis **HAIS Response Date** 3/24/95

Much of the user access data utilized in the user model was based on information obtained from operational systems. Future plans include broadening the base of existing system statistics to include additional operational systems; collecting and analyzing more detailed information from existing DAACs and EOSDIS related data centers; and interviewing developers and operations personnel at other systems for lessons learned. Verification plans include continued review of analyses by data center personnel as well as review by the Ad Hoc Working Group for Consumers.

Though much of the base of information used in analyses was specific to ECS users (i.e., the ECS science user senarios; earth system science literature review; professional society membership data; etc.), a large collection of user access data was obtained from the existing DAACs and Data Centers. Specific information regarding annual user accesses, archive volumes, distinct users, and distribution patterns were requested from Langley, Marshall, EDC, JPL, ASF, NSIDC and Goddard via the ECS scientists at the DAACs. Assumptions, estimates and projections were made based on the collective data, and results were reviewed by DAAC and data center personnel. The verified information was used to produce the ECS User Pull Technical Baseline. In addition, the demographics and user accesses from these sources were an important component in many of the analyses conducted for the designers.

Collection of existing system statistics is ongoing. Headquarters has led an effort to initiate consistent collection of DAAC center statistics; which include information requested by ECS modelers. It is anticipated that the first results of this effort will be available for ECS analysis this summer. In addition, ECS is expanding its collection of statistics to include other data centers including NSSDC, NCAR, UARS CDHF and Emery's test bed. An analysis of Emery's AVHRR test bed statistics has been conducted and explanations for differences between the user profiles were identified. Other verification activities include comparison of arrival rate patterns with existing system (URDB) arrival rates, and review of all user model methods and results by the Ad Hoc Working Group for Consumers prior to CDR.

Status **Closed** **Date Closed** **4/12/95** **Sponsor** **Daly**

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